



# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.  | FILING DATE           | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|--|-----------------------|----------------------|-------------------------|------------------|
| 10/060,225   | 02/01/2002            | Yoshihiro Ishikawa   | 219042US2               | 8038             |
| 22850 7:   | 22850 7590 09/20/2004 |                      | EXAMINER                |                  |
| OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET |                       |                      | ADDY, ANTHONY S         |                  |
|  | ALEXANDRIA, VA 22314  |                      | ART UNIT                | PAPER NUMBER     |
|  |                       |                      | 2681                    | ¥                |
|  |                       |                      | DATE MAILED: 09/20/2004 | 7                |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.   | Applicant(s)   |  |  |  |  |
|--|---|--|--|--|--|--|
| •  | 10/060,225  | ISHIKAWA ET AL.  |  |  |  |  |
| Office Action Summary  | Examiner  |  |  |  |  |  |
| •  |   | Art Unit   |  |  |  |  |
| The MAILING DATE of this communication app   | Anthony S Addy  | 2681   |  |  |  |  |
| Period for Reply   |   |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |  |
| Status   |   |  |  |  |  |  |
| 1)⊠ Responsive to communication(s) filed on <u>01 Fe</u>   | ebruary 2002.   |  |  |  |  |  |
|  | action is non-final.  |  |  |  |  |  |
| 3) Since this application is in condition for allowar  |   | secution as to the merits is   |  |  |  |  |
|  | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |  |  |  |  |  |
| Disposition of Claims  |   |  |  |  |  |  |
| 4)⊠ Claim(s) <u>1-52</u> is/are pending in the application.  |   |  |  |  |  |  |
|  | 4a) Of the above claim(s) is/are withdrawn from consideration.  |  |  |  |  |  |
| 5) Claim(s) is/are allowed.  | _   |  |  |  |  |  |
| 6)⊠ Claim(s) <u>1 and 27</u> is/are rejected.  |   |  |  |  |  |  |
| 7)⊠ Claim(s) <u>2-26 and 28-52</u> is/are objected to.   |   |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or  | 8) Claim(s) are subject to restriction and/or election requirement.   |  |  |  |  |  |
| Application Papers   |   |  |  |  |  |  |
| 9)☐ The specification is objected to by the Examine  | r.  |  |  |  |  |  |
| 10)⊠ The drawing(s) filed on <u>01 February 2002</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.  |   |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |   |  |  |  |  |  |
| 11)☐ The oath or declaration is objected to by the Ex  | aminer. Note the attached Office  | Action or form PTO-152.  |  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |  |  |  |  |  |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).   |   |  |  |  |  |  |
| a)⊠ All b)☐ Some * c)☐ None of:  |   |  |  |  |  |  |
| 1. Certified copies of the priority documents have been received.  |   |  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |   |  |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage  |   |  |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  |   |  |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |   |  |  |  |  |  |
| Attaches auto  | ·   |  |  |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)   |   |  |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date  |   |  |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date 6.  5) Notice of Informal Patent Application (PTO-152)  6) Other:  |   |  |  |  |  |  |

Art Unit: 2681

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Gustavsson et al., U.S. Patent Number 6,721,568, (hereafter Gustavsson).

Regarding claim 1, Gustavsson teaches a mobile communications system using a code division multiple access method (see col. 2, lines 1-4), a call acceptance controlling apparatus for controlling acceptance of new calls and handover calls when a communication through a radio channel is performed between a mobile station in a cell and two or more radio base stations each forming a cell (see col. 2, lines 22-34 and col. 4, line 4 through col. 5, line 3 and Fig. 1; where two base stations 14 and 15 are shown), the call acceptance controlling apparatus comprising: new call acceptance

Art Unit: 2681

limiting means for restricting acceptance of a new call before any one of the following events takes place, namely, an uplink interference amount in each radio channel from each mobile station that communicates with a radio base station to the radio base station reaching a predetermined maximum interference amount of the mobile communications system (see col. 5, lines 44-55 and col. 7, lines 16-28), a downlink total transmission power from the radio base station to mobile stations reaching a predetermined maximum power level of the mobile communications system (see col. 5, lines 44-55).

Regarding claim 27, Gustavsson teaches a mobile communications system using a code division multiple access method (see col. 2, lines 1-4), a call acceptance controlling method for controlling acceptance of new calls and handover calls when a communication through a radio channel is performed between a mobile station in a cell and two or more radio base stations each forming a cell (see col. 2, lines 22-34 and col. 4, line 4 through col. 5, line 3 and Fig. 1; where two base stations 14 and 15 are shown), wherein acceptance of a new call is limited before any one of the following events takes place, namely, an uplink interference amount in each radio channel from each mobile station that communicates with a radio base station to the radio base station reaching a predetermined maximum interference amount of the mobile communications system (see col. 5, lines 44-55 and col. 7, lines 16-28), a downlink total transmission power from the radio base station to mobile stations reaching a predetermined maximum power level of the mobile communications system (see col. 5, lines 44-55).

Art Unit: 2681

## Allowable Subject Matter

3. Claims 2-26 and 28-52 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The following is a statement of reasons for the indication of allowable subject matter: With respect to claims 2 and 28, Gustavsson teaches a call acceptance controlling apparatus and method, wherein the new call acceptance limiting means restricts acceptance of a new call before the uplink interference amount of a radio channel reaches the predetermined maximum interference amount of the mobile communications system and rejecting the new call to make the new call a lost call (see col. 5, lines 44-55 and col. 7, lines 16-28).

The instant invention with respect to claims 2 and 28, teaches a mobile communications system and method, rejecting the new call to make the new call a lost call, when an uplink interference amount of any radio channel exceeds a first threshold value comprising; when an uplink interference amount of any radio channel exceeds a first threshold value, comprising; interference amount measuring means for measuring an interference amount of each uplink radio channel from a mobile station to a radio base station when there is a request for a new call, and interference amount checking means for determining whether an interference amount of any radio channel measured by the interference amount measuring means is greater than the first threshold value that is defined as being smaller than the predetermined maximum interference amount of the mobile communications system. These novel features in combination with the

Art Unit: 2681

other limitations of claims 2 and 28 are not taught nor fairly suggested by Gustavsson nor any of the prior art of record, alone or in combination.

With respect to claims 3 and 29, Gustavsson teaches a call acceptance controlling apparatus and method, wherein the new call acceptance limiting means restricts acceptance of a new call before the uplink interference amount of a radio channel reaches the predetermined maximum interference amount of the mobile communications system and rejecting the new call to make the new call a lost call (see col. 5, lines 44-55 and col. 7, lines 16-28).

The instant invention with respect to claims 3 and 29, teaches a mobile communications system and method, rejecting the new call to make the new call a lost call, when an uplink interference amount of any radio channel exceeds a second threshold value, comprising; interference amount estimating means for estimating an interference amount of each uplink radio channel if a request for a new call is accepted, and interference amount checking means for determining whether an interference amount of any radio channel estimated by the interference amount estimating means is greater than the second threshold value that is defined as being smaller than the predetermined maximum interference amount of the mobile communications system. These novel features in combination with the other limitations of claims 3 and 29 are not taught nor fairly suggested by Gustavsson nor any of the prior art of record, alone or in combination.

With respect to claims 4 and 30, Gustavsson teaches a call acceptance controlling apparatus and method, wherein the new call acceptance limiting means

Art Unit: 2681

restricts acceptance of a new call before the downlink total transmission power reaches the predetermined maximum power level of the mobile communications system and rejecting the new call to make the new call a lost call (see col. 5, lines 44-55 and col. 7, lines 16-28).

The instant invention with respect to claims 4 and 30, teaches a mobile communications system and method, rejecting the new call to make the new call a lost call, when the downlink total transmission power level exceeds a third threshold value, comprising; total downlink transmission power measuring means for measuring a total transmission power of the radio base station, and total downlink transmission power checking means for determining whether the total transmission power measured by the total downlink transmission power measuring means is greater than the third threshold value that is defined as being smaller than the predetermined maximum power level of the mobile communications system. These novel features in combination with the other limitations of claims 4 and 30 are not taught nor fairly suggested by Gustavsson nor any of the prior art of record, alone or in combination.

With respect to claims 5 and 31, Gustavsson teaches a call acceptance controlling apparatus and method, wherein the new call acceptance limiting means restricts acceptance of a new call before the downlink total transmission power reaches the predetermined maximum power level of the mobile communications system and rejecting the new call to make the new call a lost call (see col. 5, lines 44-55 and col. 7, lines 16-28).

Art Unit: 2681

The instant invention with respect to claims 5 and 31, teaches a mobile communications system and method, rejecting the new call to make the new call a lost call, when the total downlink transmission power level exceeds a fourth threshold value, comprising: total downlink transmission power estimating means for estimating a downlink total transmission power of the radio base station if a requested call is accepted, and total downlink transmission power checking means for determining whether the downlink total transmission power estimated by the total downlink transmission power estimated by the total downlink transmission power estimated by the total downlink transmission power estimating means is greater than the fourth threshold value that is defined as being smaller than the predetermined maximum power level of the mobile communications system. These novel features in combination with the other limitations of claims 5 and 31 are not taught nor fairly suggested by Gustavsson nor any of the prior art of record, alone or in combination.

With respect to claims 6 and 32, Gustavsson teaches a call acceptance controlling apparatus and method (see col. 2, lines 22-34).

The instant invention with respect to claims 6 and 32, teaches a mobile communications system and method, wherein the new call acceptance limiting means restricts acceptance of a new call before all the spread code resources of a radio base station is consumed, rejecting the new call to make the new call a lost call, when an amount of the spread code resources available is less than a fifth threshold value, comprising: spread code resources measuring means for measuring an amount of the spread code resources available in the radio base station, and spread code resources checking means for determining whether the amount of the spread code resources

Art Unit: 2681

measured by the spread code resources measuring means is less than the fifth threshold value. These novel features in combination with the other limitations of claims 6 and 32 are not taught nor fairly suggested by Gustavsson nor any of the prior art of record, alone or in combination.

#### Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chheda et al., U.S. Patent Number 6,038,448 discloses a wireless communication system having hand-off based upon relative pilot signal strengths.

Huang et al., U.S. Patent Number 6,611,506 discloses an enhanced channel allocation among multiple carriers in a spread spectrum communications system.

Kohji, (EP 0 856 955 A2) discloses a CDMA power control system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony S Addy whose telephone number is 703-305-8487. The examiner can normally be reached on Mon-Fri 8:00am-4: 30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R Hudspeth can be reached on 703-308-4825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Anthony S. Addy September 9, 2004

ERIKA A. GARY PRIMARY EXAMINER